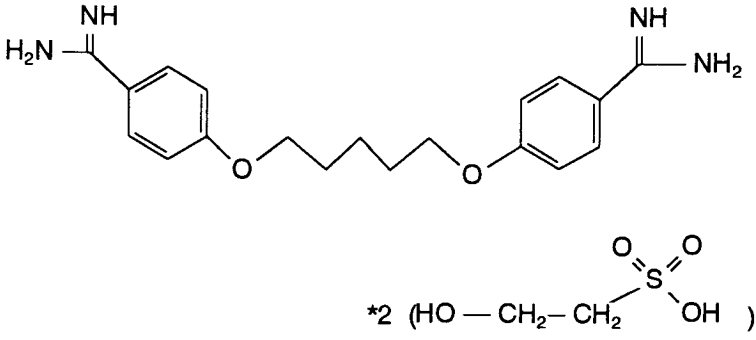
PENTAMIDINE ISETHIONATE

NSC - 620107



Chemical Name: 4,4′-Diamidinodiphenoxypentane, di(β-hydroxy-ethanesulfonate)

Other Name: Pentam®300

Molecular Formula: $C_{19}H_{24}N_4O_2 \cdot 2C_2H_6O_4S$ **M.W.:** 592.8

Approximate Solubility:	(mg/mL)
Water	> 30
Acetate buffer, pH 4	≈2.5
Carbonate buffer, pH 9	< 1
0.1 N HCl	≈ 2.5
0.1 NaOH	< 1
Ethanol (95%)	≈ 1.25
Methanol	≈ 1.25
Butanol	< 1
Dimethyl acetamide	≈ 15

Dimethyl sulfoxide	≈ 15
Acetonitrile	< 1
Ethyl acetate	< 1
Chloroform	< 1
Toluene	< 1

Stability:

Bulk:
The compound was found to be stable in the bulk form when exposed to light at ambient or 60 °C temperature for 90 days.

Solution:
Pentamidine isethionate was found to be stable as a solution in normal saline at room temperature over a 72 hour period.

Ultraviolet Absorption:

(methanol)

λ_{max}	ε
265± 2 nm	31400 - 80
264 ± 2 nm	30,000 - 33,000

High Performance Liquid Chromatography:

Column:	Beckman Ultrasphere C_{18}, 5μ, 4.6 x 250 mm i.d.

Mobile Phase:	Acetonitrile: 2 mM Tetramethyl-ammonium Choride, pH 2.25 with phosphoric acid (45:55)
Flow Rate:	1.0 mL/min
Detection:	UV at 254 nm
Sample Preparation:	0.4 mg NSC 620107 in methanol
Internal Standard:	Butyrophenone, μL/mL in methanol
Retention Volume:	12.4 mL (NSC 620107) 19.8 mL (I.S.)